REMARKS

Applicants gratefully acknowledge the telephonic interview with the Examiner conducted on November 4, 2002. Applicants have attempted to address the issues raised by the Examiner in the interview with this response.

Applicants request reconsideration of the application in view of the preceding amendments and the following remarks. Claims 3, 5, 7-9, 12-14, 20, 22 and 23 have been canceled. Claims 1 and 18 have been amended. Claims 1, 2, 4, 6, 10, 11, 15-19 and 21 are pending. Claims 1 and 18 are independent claims.

Support for the amendments to the claims is found in the specification and drawings as filed. No new matter has been added in making the amendments herein.

ELECTION/RESTRICTION REQUIREMENT

Pursuant to a telephone conversation between Gunther Hanke and the Examiner on September 3, 2002, a provisional election was made without traverse to prosecute the invention of Group I, claims 1-21 and furthermore to prosecute species C (FIGS. 7C and 8) drawn to claims 1, 2, 4, 6, 10, 11, 15-19 and 21. Applicants hereby confirm the election made without traverse. Claims 3, 5, 7-9, 12-14, 20, 22 and 23 have been withdrawn from further consideration by the Examiner as being drawn to a non-elected invention. Because Applicants have made a provisional election to prosecute the invention of Group I, Species C, claims 1, 2, 4, 6, 10, 11, 15-19 and 21, Applicants have canceled claims 3, 5, 7-9, 12-14, 20, 22 and 23 without prejudice. No amendment of inventorship is required.

INFORMATION DISCLOSURE STATEMENT

The Examiner noted that some of the references provided previously and cited in the Information Disclosure Statement filed June 13, 2002 were not available in the parent application No. 09/284,895 which was referenced in the Information Disclosure Statement. A supplemental

Information Disclosure Statement containing copies of the missing references is transmitted herewith for the Examiner's consideration.

35 U.S.C. § 102(b) REJECTIONS

The Examiner rejected claims 1, 2, 4, 6, 10, 11, 15, 16, 18, 19 and 21 under 35 U.S.C. § 102(b) as being anticipated by Palmaz, U.S. Patent No. 5,102,417. The Examiner further rejected claims 1, 2, 6, 11, 15-19 and 21 under 35 U.S.C. § 102(e) as being anticipated by Milo, U.S. Patent No. 6,206,911. The Examiner further rejected claims 1, 2, 4, 11, 15, 16, 18, 19 and 21 under 35 U.S.C. § 102(e) as being anticipated by Killion, U.S. Patent No. 5,868,781. if claimed Applicants respectfully traverse these rejections.

Applicants have amended independent claims 1 and 18 to recite the limitation that the reinforcing member lies in the same circumferential plane as the cylindrical elements and has a configuration that is essentially parallel to the longitudinal axis when the stent is in the contracted condition and is configured to limit the radial expansion of the cylindrical elements when the stent is in the expanded condition. Support for the amendments can be found in the specification at page 12, lines 9-22, and in FIGS. 7A-7L and 10B. With the reinforcing member in the same cylindrical plane as the cylindrical elements and essentially parallel to the longitudinal axis when the stent is in the contracted condition, the smallest delivery diameter is attained. With the reinforcing member configured to limit the radial expansion of the cylindrical elements, overstressing the stent struts is prevented. Applicants respectfully assert that neither Palmaz, Milo nor Killion teach or suggest these limitations .

With regard to the Palmaz reference, Applicants respectfully disagree with the Examiner's characterization of the location of the cylindrical rings and reinforcing members. Applicants respectfully submit that there is no disclosure in the written description that supports the Examiner's characterization. Applicants further respectfully submit that nowhere in Palmaz is it disclosed or taught that the portions of the stent characterized by the Examiner as the reinforcing members are configured to limit the radial expansion of the cylindrical elements. See marked-up copy of Palmaz FIG. 10 attached to Office action.

With regard to the Milo reference, Applicants respectfully disagree with the Examiner's characterization of the location of the cylindrical rings and reinforcing members. Applicants respectfully submit that there is no disclosure in the written description that supports the Examiner's characterization. Applicants further respectfully note that the portions of the stent characterized by the Examiner as the reinforcing members are formed by interconnecting leg segments 13 that form diamond shaped cells 17, the diamond shaped cells serving as spacers between the zig-zag legs. See marked-up copy of FIG. 1 from Milo attached to Office action and c. 3, ll. 9-18 of Milo. Moreover, Applicants respectfully submit that nowhere in Milo is it disclosed or taught that the segments 13 or diamond shaped cells 17 are configured to limit the radial expansion of the cylindrical elements.

With regard to the Killion reference, Applicants respectfully note that the portions of the stent characterized by the Examiner as the reinforcing members are the arms 455. See marked-up copy of Killion FIG. 4b attached to Office action. Applicants further respectfully note that the arms 455 are illustrated in FIG. 4b, which is an enlarged side view of a stent in the unexpanded condition, as essentially transverse to the longitudinal axis of the stent, not essentially parallel to the longitudinal axis. Moreover, Applicants respectfully note that the arms 455 have a "free end" and are "compressed into the interior of the stent" when the stent is unexpanded. Killion at c. 5, ll. 1-11 and FIG. 4b. Applicants respectfully submit that the "free end" of the arms 455 may preclude collapse of the stent, but cannot be configured to limit the radial expansion of the cylindrical elements and that "compressed into the interior of the stent" precludes the arms from being in the same circumferential plane as the cylindrical elements.

Applicants respectfully assert that independent claims 1 and 18 are allowable because none of the cited references teach or suggest a reinforcing member that lies in the same circumferential plane as the cylindrical elements, has a configuration that is essentially parallel to the longitudinal axis when the stent is in the contracted condition and is configured to limit the radial expansion of the cylindrical elements as recited in the claims. Applicants further respectfully assert that claims 2, 4, 6, 10, 11 and 15-17, which depend on claim 1, and claims 19 and 21, which depend on claim 18, are also allowable over the cited references.

35 U.S.C. § 103(a) REJECTIONS

The Examiner rejected claim 17 under 35 U.S.C. § 103(a) as being unpatentable over Palmaz in view of Bley et al., U.S. Patent No. 5,674,241. Applicants respectfully traverse this rejection.

As noted above, independent claim 1 is allowable over Palmaz, which neither teaches nor suggests a reinforcing member configured to limit the radial expansion of the cylindrical elements. Applicants respectfully submit that Bley et al. neither teaches nor suggests a reinforcing member that lies in the same circumferential plane as the cylindrical elements, has a configuration that is essentially parallel to the longitudinal axis when the stent is in the contracted condition and is configured to limit the radial expansion of the cylindrical elements as recited in claim 1. Therefore, Applicants respectfully assert that independent 1 is allowable over the cited references. Applicants further respectfully assert that claim 17, which depends on claim 1, is also allowable over the cited references.

CONCLUSION

Applicants have attempted to respond to each and every objection and rejection set forth in the outstanding Office action. In view of the above amendments and remarks, Applicants respectfully request that the application be reconsidered, the claims allowed and the application passed to issue.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current Amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Claims 3, 5, 7-9, 12-14, 20, 22 and 23 have been canceled without prejudice.

The following claims have been amended as indicated:

1. (Amended) A flexible stent for implantation in a body lumen and expandable from a contracted condition to an expanded condition, comprising:

a plurality of adjacent cylindrical elements which are expandable in the radial direction and arranged in alignment along a longitudinal stent axis;

the cylindrical elements formed in a serpentine wave pattern transverse to the longitudinal axis and containing a plurality of alternating peaks and valleys;

at least one interconnecting member extending between adjacent cylindrical elements and connecting them to one another;

at least one reinforcing member extending across a width of the alternating peaks and valleys, the reinforcing member lying in the same circumferential plane as the cylindrical elements and having a configuration that is essentially parallel to the longitudinal axis when the stent is in the contracted condition and configured to limit the radial expansion of the cylindrical elements;

the serpentine pattern containing varying degrees of curvature in regions of the peaks and valleys adapted so that radial expansion of the adjacent cylindrical elements is substantially uniform around their circumferences during expansion of the stent from [its] the contracted condition to [its] the expanded condition.

18. (Twice Amended) A longitudinally flexible stent for implanting in a body lumen and expandable from a contracted condition to an expanded condition, comprising:

a plurality of adjacent cylindrical elements which are independently expandable in the radial direction and arranged in alignment along a longitudinal stent axis;

the cylindrical elements formed in a serpentine wave pattern transverse to the longitudinal axis and containing a plurality of alternating peaks and valleys;

at least one interconnecting member extending between adjacent cylindrical elements and connecting them to one another;

a reinforcing member extending across only one of each said peaks and valleys, the reinforcing member lying in the same circumferential plane as the cylindrical elements and having a configuration that is essentially parallel to the longitudinal axis when the stent is in the contracted condition and configured to limit the radial expansion of the cylindrical elements ; and

the serpentine wave pattern configured in size and shape so that the cylindrical elements generally expand in a uniform manner around their circumferences during expansion of the stent from [its] the contracted condition to [its] the expanded condition.